Code of Practice for Dental Radiology

Submission form

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Please return this form to:
Email: mailto:orsenquiries@moh.govt.nz (including ‘radiology code’ in the subject line)
or post: Office of Radiation Safety, PO Box 3877, Christchurch 8140
Consultation questions
The Office of Radiation Safety is seeking comments on the following.

Scope
1. The scope of the code relates to the use of X-rays for intra-oral, panoramic and cephalometric dental procedures. (Note this means a separate code for diagnostic and interventional radiology includes the increased requirements for the dental use of cone beam computed tomography equipment.) Is this appropriate?
   - [X] Yes
   - [ ] No

   If no, please provide alternative suggestions for the scope of this code.

   From an individual dental practitioner’s point of view, a single reference source that covered all forms of dental radiography may be desirable. However, having reviewed both the draft code of practice for dental radiology and the code of practice for diagnostic and interventional radiology, which covers the use of cone beam computed tomography (CBCT), we agree the approach taken is the most appropriate. The standards specifically relating to the use of CBCT are interspersed throughout the Code of Practice for Diagnostic and Interventional Radiology, and so could not be easily ‘inserted’ into the dental specific code of practice.

Roles and responsibilities
2. Are the roles and responsibilities of key parties adequately described?
   - [ ] Yes
   - [X] No

   If no, please provide details of parties that should or should not be included and any changes that should be made to the descriptions.
The majority of the roles and responsibilities of the key parties are adequately described. However the term ‘radiological practitioner’ is not defined, and its roles and responsibilities not described.

A definition, and the roles and responsibilities for this person, are proposed for your consideration based on the following assumptions:

The ‘radiological practitioner’ is a person who:
- has received formal education and training that includes dental radiology—this may be a dental practitioner, for example, a dentist, dental specialist, dental therapist, dental hygienist or orthodontic auxiliary; or it may be a radiographer or radiologist taking images for dental purposes
- is able to competently and independently perform, and oversee, dental radiological procedures
- is authorised in the Radiation Safety Regulations to use radiological equipment for dental radiological procedures (i.e. exempted from the need to obtain a use licence, but authorised to use radiological equipment).

The following wording is proposed for the ‘roles and responsibilities’ of the ‘radiological practitioner’:

A registered health practitioner with education and training in dental radiology who is competent to perform independently and oversee dental radiological procedures. This could include, for example, a dentist, dental specialist, dental therapist, dental hygienist, oral health therapist, orthodontic auxiliary, radiographer, or radiologist.

Regarding the roles and responsibilities of the ‘Dental practitioner’, it is suggested that the word “specialised” be removed from the description—to avoid any implication of a specialist qualification.

1 The Dental Council gazetted an oral health therapy scope of practice that comes into effect on 1 November 2017 (2016-gs6131).

Definitions

3. Are the definitions appropriate and comprehensive?
   - Yes
   - No

If no, please provide suggestions for any new terms to be defined or changes to existing definitions.

As a follow-on from the comments above, the following definition for the ‘radiological practitioner’ is proposed:

A health practitioner who is registered and has a current practising certificate in a scope of practice listed in the Radiation Safety Regulations—authorised to perform dental radiological procedures without the need for a use licence.

The addition of a definition and roles and responsibilities for “radiation worker” is proposed—similar to those in the Code of Practice Diagnostic and Interventional Radiology.
Managing entity obligations

4. a. Are the subheadings in the ‘Managing entity’ section appropriate?

☐ Yes
☒ No

b. Are there other changes you think are necessary to the obligations of the managing entity?

☒ Yes
☐ No

Generally the subheadings in the ‘Managing entity’ section are considered appropriate. Some areas are identified for further consideration:

**Occupational and public exposure**

Clarification is needed regarding the managing entity’s obligations for ensuring occupational and/or public exposure, as there is no stated requirement for monitoring this, or guidance how this could be achieved.

However, there are a number of related obligations throughout the document:

- Under the ‘General’ heading, the managing entity has the obligation that “…dose limits for occupational and public exposure are not exceeded…”
- Appendix 2 provides the ‘Dose limits’
- Page 9 point 8(j) requires the managing entity to maintain and publish written protocols “for monitoring staff doses and investigating doses that are above investigation levels”.

If the position is that occupational and public dose monitoring by the managing entity is not considered necessary for dental radiology, then removal of the above sections are proposed.

If on the other hand, monitoring/assessment of occupational and public exposures is considered necessary for dental radiology, then a stated monitoring requirement with detailed information on how this may be achieved, should be considered.

The *Code of Practice Diagnostic and Interventional Radiology* requires the managing entity to assess occupational and public exposures in consultation with a medical physicist (point 7), and provides detailed information as to how this might be achieved, under the heading ‘Occupational and public dose monitoring’.
Quality assurance
A dedicated section on ‘Quality assurance’ is proposed.
We suggest that section 3(j) points (i) to (iv) be moved under the proposed quality assurance heading.
We further suggest including 13(b) and 13(c) from the Code of Practice Diagnostic and Interventional Radiology under this heading to support point 8(i) in the dental radiology code of practice, which requires the managing entity to maintain written protocols for all quality-control tests, including frequency and tolerance limits.
13(b) and (c) from the Code of Practice Diagnostic and Interventional Radiology states:

(b) quality control tests on other equipment, devices or facilities that have an impact on the successful outcome of the radiological procedure
(c) the establishment of tolerance limits for the physical parameters mentioned in clauses 13(a) and (b), and the implementation of corrective actions if measured values fall outside those tolerance limits.

Training
Minor amendments to the wording of point 4(a)(i) is proposed:
4(a) (i) are appropriately specialised and qualified radiological practitioners, and have continuing education and training, so that they can perform their duties competently, including responsibilities for radiation protection of patients.

Radiological procedures
The following minor amendments are suggested:
Point 6, second point—to make it entirely clear who the radiological practitioner may delegate responsibility to, the following is proposed:
Any delegation of a radiological practitioner responsibility to another radiological practitioner is documented
This is based on the principle that under the Radiation Safety Act the task of taking a radiographic image can be delegated by a radiological practitioner, but the responsibility cannot.
Point 6 (b) – to add ‘dental’, to read:
Sufficient dental and/or medical personnel are available to successfully perform the procedure.

Practitioner obligations
5. a. Are the subheadings in the ‘Practitioner’ section appropriate?
   ☒ Yes
   ☐ No
   b. Are there other changes you think are necessary to the obligations of the practitioner?
      ☐ Yes
      ☒ No

Please provide any comments below.
Point 14—suggest to amend wording as follows, for consistency with the wording of points 11 and 13:

For any radiological procedure involving a comforter/carer, the radiological practitioner must:

Optimisation of protection and safety

You may wish to consider substituting the wording at point 15 that prefaces points (a) to (g), with that from the Code of Practice Diagnostic and Interventional Radiology, for consistency:

The dental practitioner must keep doses arising from medical exposure as low as reasonably achievable by:

(Current proposed: The dental practitioner must ensure that operational aspects of optimisation of protection and safety of patients undergoing radiological procedures are implemented by:)

It is acknowledged that a definition of optimisation is provided earlier in the document. Dental practitioners are familiar with the ALARA principle and its application in dental radiology. It is considered that the shorter description accurately reflects the purpose of the points that follow.

Other parties

6. a. Are there other parties who should have defined responsibilities?
   - [ ] Yes
   - [ ] No

b. Are there other changes you think are necessary to the obligations of other parties?
   - [ ] Yes
   - [ ] No

Please provide any comments below.

Worker

You may wish to consider adding a point 20(f) - Properly use protective equipment—to maintain consistency with the Code of Practice Diagnostic and Interventional Radiology.

Additional comments

7 a. Was the information in this code appropriately presented?
   - [ ] Yes
   - [ ] No

b. Was the information in this code easy to find?
   - [ ] Yes
   - [ ] No

c. Are there any changes to the way of presenting information you would like to suggest?
   - [ ] Yes
   - [ ] No

d. Are there circumstances that are not included in this code but should be? If yes, please provide more details in the comments box below.
   - [ ] Yes
   - [ ] No
e. Is the information presented in this code easy to understand?
   ☒ Yes
   ☐ No

f. Is there any other information or subject that should be included in this code?
   ☒ Yes
   ☐ No

Please provide any comments related to your answers to 7(a)–(f) below.

**Additional Comments:**

**Appendix 1: Equipment**

The statement “These requirements apply to all radiological equipment used in dental radiography” is not strictly correct, as CBCT is covered in an alternate document, with different ‘general’ requirements.

Alternative proposed wording:

These requirements apply to all radiological equipment used in dental radiography for intra-oral, panoramic and cephalometric dental radiography.

**Digital radiography**

We note that there are requirements related to digital radiography on page 19 of the Code of Practice Diagnostic and Interventional Radiology. We are uncertain as to the necessity to include these, or similar, requirements in the dental radiology code of practice.

A large number of dental practices now use digital radiography, so if the inclusion of such requirements was considered to be appropriate from a technical viewpoint, they would be applicable within the context of contemporary dental practice.

**Code of Practice Diagnostic and Interventional Radiology**

The scope of the Code of Practice for Dental Radiology states the code “…applies to all activities…used for intra-oral, panoramic and cephalometric dental procedures.”

The scope of the Code of Practice Diagnostic and Interventional Radiology states that the code “…applies to all activities…excluding intra-oral and panoramic dental procedures”. The addition of ‘cephalometric’ to the latter scope wording is proposed for clarity and consistency across both documents.

**Use of radiation source under direct supervision of an authorised person**

Section 21(4) of the Radiation Safety Act allows for a natural person (for example dental assistant not regulated) who does not hold a use licence, or not authorised under the regulations to take X-ray images under direct supervision (supervision by an authorised person who is physically present and able to intervene-i.e. registered oral health practitioner in relevant scope of practice).

Based on frequent questions on the legality and particular obligations associated with such delegation, it is proposed that the obligations associated with delegation of taking of a radiological image be emphasised in the dental radiology code of practice.